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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MAHMOUDI, HASSAN

ART UNIT PAPER NUMBER

2175

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/675,699

Applicant(s)

MCMULLAN ET AL.

Examiner

Tony Mahmoudi

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-18 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Remarks

1. In response to communications filed on 02-June-21004, claims 1-18 are presently pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkowski (U.S. Pub. No. 2003/0139975) in view of Erickson et al (U.S. patent No. 6,412,009.)

As to claim 1, Perkowski teaches a computer system (see Abstract) comprising:

a first computer network (see figures 2-1 and 2-2 and see page 8, paragraph 96);

a first computer subsystem comprising (see figures 1 and 2C, and page 9, paragraph 102)

collaborative application software (see page 8, paragraph 95), with the collaborative

application software comprising machine readable instructions (see page 9, paragraph 105)

for sending application output data over the computer network (see page 8, paragraphs 95-96,

and see page 14, paragraph 175);

Art Unit: 2165

a second computer subsystem structured to receive the application output data (see figure 2C, and see page 9, paragraph 102); and

a second-subsystem firewall (see figure 3C9), located in front of the second application subsystem (see figure 2C, and see page 9, paragraph 102), the second-subsystem firewall structured to communicate the application output data to the second computer subsystem (see page 14, paragraph 175) through a hypertext transfer protocol (see page 7, paragraph 83.)

Perkowski does not teach a keep-alive connection that is kept open for the duration of a collaboration (although Perkowski teaches a “dedicated Internet connection”, see page 15, paragraph 178.)

Erickson et al teaches a persistent HTTP tunnel (see Abstract), in which he teaches a keep-alive connection that is kept open for the duration of a collaboration (see column 8, line 32 through column 9, line 24.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Perkowski to include a keep-alive connection that is kept open for the duration of a collaboration.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Perkowski by the teaching of Erickson et al, because a keep-alive connection that is kept open for the duration of a collaboration, would enable the system to keep the connection active/alive even during periods of inactivity, as taught by Erickson et al (see column 9, lines 17-19.)

Art Unit: 2165

As to claim 2, Perkowski as modified teaches wherein the computer system further comprises communication software (see Perkowski, page 11, paragraph 131) comprising machine readable instructions (it is inherent that communication software has machine readable instructions) for opening a first-subsystem thread in the second computer subsystem for receiving the application output data (see Perkowski, page 13, paragraph 163.)

As to claim 3, Perkowski as modified teaches wherein:
the second computer subsystem comprises a second-subsystem socket structured to receive the application output data (see Perkowski, page 18, paragraph 206); and
the communication software (see Perkowski, page 11, paragraph 131) further comprises machine readable instructions for causing the second-subsystem socket to block on a read (see Perkowski, page 18, paragraph 206, where “block on a read” is read on “carrying out a search”.)

As to claim 4, Perkowski as modified teaches wherein the communication software further comprises instructions causing the first-subsystem thread to sleep (see Perkowski, page 24, paragraph 233, where “sleep” is read on “idle moment”.)

As to claim 5, Perkowski as modified teaches wherein the collaborative application software sends the application output data as a stateful communication (see Perkowski, page 35, paragraph 340, where “stateful” is read on “reflecting the state of the client and the server”.)

Art Unit: 2165

As to claim 6, Perkowski as modified teaches the application output data is structured and arranged according to an HTTP protocol (see Perkowski, page 19, paragraph 208.)

Perkowski as modified still does not teach an HTTP 1.1 protocol.

Erickson et al teaches a persistent HTTP tunnel (see Abstract), in which he teaches an HTTP 1.1 protocol (see column 6, lines 14-18, and see column 7, lines 3-13.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Perkowski as modified, to include an HTTP 1.1 protocol.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Perkowski as modified, by the teaching of Erickson et al, because “a newer” HTTP 1.1 protocol, would “provide a keep-alive mechanism that allows one connection for multiple objects on an HTML page, as taught by Erickson et al (see column 2, lines 10-19.)

As to claim 7, Perkowski as modified still does not teach wherein:
the second-subsystem firewall comprises a port 80; and
the application output data is communicated across the second-subsystem firewall through a connection originated through port 80.

Erickson et al teaches a persistent HTTP tunnel (see Abstract), in which he teaches:
the second-subsystem firewall comprises a port 80 (see figure 3, port 130); and

Art Unit: 2165

the application output data is communicated across the second-subsystem firewall through a connection originated through port 80 (see column 5, line 47 through column 6, line 3.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Perkowski as modified, to include the second-subsystem firewall comprises a port 80; and the application output data is communicated across the second-subsystem firewall through a connection originated through port 80.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Perkowski as modified, by the teaching of Erickson et al, because including the second-subsystem firewall comprises a port 80; and the application output data is communicated across the second-subsystem firewall through a connection originated through port 80, would prevent making additional holes in firewalls as taught by Erickson et al (see column 5, lines 60-62.)

As to claim 8, Perkowski as modified teaches wherein the first computer subsystem (see Perkowski, figure 2C) comprises:

a server computer (see Perkowski, figure 2C, computer **202**);

a Web server computer (see Perkowski, figure 2C, server **133**), and

a second computer network structured to allow data communication between the server computer and the Web server computer (see Perkowski, figure 2C, the subsystem shown below the “corporate firewall”).)

As to claim 9, Perkowski as modified teaches wherein:

the server computer comprises at least a portion of the collaborative applications software (see Perkowski, page 11, paragraph 131); and

the Web server computer (see Perkowski, figure 2C, computer 133) is structured to receive the application output data from the server computer over the second computer network and to send the application output data to the second computer subsystem over the first computer network (see Perkowski, figure 2C, and see page 13, paragraphs 163-164.)

As to claim 10, Perkowski as modified teaches wherein:

the Web server computer (see Perkowski, figure 2C, computer 133) comprises a Web server socket structured to receive the application output data from the server computer over the second computer network (see Perkowski, page 9, paragraph 100); and

the communication software (see Perkowski, page 11, paragraph 131) further comprises machine readable instructions (it is inherent that communication software has machine readable instructions) for causing the Web server socket to block on a read (see Perkowski, page 18, paragraph 206, where “block on a read” is read on “carrying out a search”.)

As to claim 11, Perkowski as modified teaches the system further comprising:

a third computer subsystem structured to receive the application output data (see Perkowski, figure 3A9); and

Art Unit: 2165

a third-subsystem firewall, located in front of the third computer subsystem the third subsystem firewall structured to communicate the application output data to the third computer subsystem through a hypertext transfer protocol (see Perkowski, page 7, paragraph 83) keep-alive connection (see Erickson et al, column 8, line 32 though column 9, line 24.)

As to claim 12, Perkowski as modified teaches wherein:

the third computer subsystem comprises a third-subsystem socket structured to receive the application output data (see Perkowski, page 18, paragraph 206); and

the communication software further comprises machine readable instructions for causing the third-subsystem socket to block on a read (see Perkowski, page 18, paragraph 206, where “block on a read” is read on “carrying out a search”).

As to claim 13, Perkowski as modified teaches wherein communication between the first computer subsystem, the second computer subsystem and the third computer subsystem is in real-time (see Perkowski, page 67, paragraph 760.)

As to claim 14, Perkowski as modified teaches wherein the collaborative application software comprises at least one of the following functions: a word processor, a task scheduling tool, a graphics program, a presentation program, a spreadsheet, a game, a music studio (see Perkowski, page 66, paragraph 757.)

Art Unit: 2165

As to claim 15, Perkowski teaches a method of communicating over a computer network (see Abstract), the method comprising the steps of:

generating, by a collaborative application software residing on a server computer, an application output communication (see page 8, paragraph 97);

sending, over a first computer network (see figure 2C), the application output communication to a client firewall (see page 7, paragraph 83);

communicating the application output communication (see page 2, paragraph 22, where “communicating” is read on “transmitting”) across the client firewall through a hypertext transfer protocol (see page 15, paragraph 178); and

receiving the application output data at a client computer (see page 14, paragraph 175.)

Perkowski does not teach a keep alive connection; and keeping the hypertext transfer protocol keep-alive connection for the duration of a collaboration (although Perkowski teaches a “dedicated Internet connection”, see page 15, paragraph 178.)

Erickson et al teaches a persistent HTTP tunnel (see Abstract), in which he teaches a keep-alive connection that is kept open for the duration of a collaboration (see column 8, line 32 though column 9, line 24.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Perkowski to include a keep-alive connection that is kept open for the duration of a collaboration.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Perkowski by the teaching of Erickson et al, because a keep-alive connection that is kept open for the duration of a collaboration, would enable the

Art Unit: 2165

system to keep the connection active/alive even during periods of inactivity, as taught by Erickson et al (see column 9, lines 17-19.)

As to claim 16, Perkowski as modified teaches wherein the client computer blocks on a read when waiting for and receiving the application output data (see Perkowski, page 18, paragraph 206, where “block on a read” is read on “carrying out a search”).

As to claim 17, Perkowski as modified teaches the method further comprising the step of originating a connection across the client firewall through a port of client firewall (see figure 2C.)

Perkowski as modified still does not teach connecting through port 80 of the firewall.

Erickson et al teaches a persistent HTTP tunnel (see Abstract), in which he teaches connecting through port 80 of the firewall (see column 5, line 47 through column 6, line 3.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Perkowski as modified, to include connecting through port 80 of the firewall.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Perkowski as modified, by the teaching of Erickson et al, because connecting through port 80 of the firewall, would prevent making additional holes in firewalls as taught by Erickson et al (see column 5, lines 60-62.)

Art Unit: 2165

As to claim 18, Perkowski as modified teaches wherein the application output data is sent, at the sending step, as a plurality of data packets structured and arranged according to HTTP (see page 19, paragraph 208.)

Perkowski as modified still does not teach an HTTP 1.1.

Erickson et al teaches a persistent HTTP tunnel (see Abstract), in which he teaches an HTTP 1.1 (see column 6, lines 14-18, and see column 7, lines 3-13.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Perkowski as modified, to include an HTTP 1.1.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Perkowski as modified, by the teaching of Erickson et al, because “a newer” HTTP 1.1, would “provide a keep-alive mechanism that allows one connection for multiple objects on an HTML page, as taught by Erickson et al (see column 2, lines 10-19.)

Response to Arguments

4. Applicant's arguments filed on 02-June-2004 with respect to the rejected claims in view of the cited references have been fully considered but they are not deemed persuasive:

In response to the applicant's arguments regarding the arrangement of the disclosed specification, the arguments are fully considered and the applicant's remarks are noted. The Objection previously made to the arrangement of specification is withdrawn by the examiner.

In response to the applicant's arguments that limitations of claim 1 "are not taught or suggested by Perkowski, Erickson or a combination of them", the arguments have been fully considered but are not deemed persuasive, because Perkowski teaches: a first computer subsystem comprising (see figures 1 and 2C, and page 9, paragraph 102) collaborative application software (see page 8, paragraph 95), with the collaborative application software comprising machine readable instructions (see page 9, paragraph 105) for sending application output data over the computer network (see page 8, paragraphs 95-96, and see page 14, paragraph 175); and communicating the application output data to the second computer subsystem (see page 14, paragraph 175) through a hypertext transfer protocol (see page 7, paragraph 83.)

In response to the applicant's arguments that "nothing in this description, these figures, or anywhere else in Perkowski teaches or suggests that the Collaborative Replenishment System sends output data over a network, through a second sub-system firewall, to a second computer subsystem", the arguments have been fully considered but are not deemed persuasive, because "Collaborative Replenishment System" is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Furthermore, Perkowski teaches a second-subsystem firewall (see figure 3C9), located in front of the second application subsystem (see figure 2C, and see page 9, paragraph 102), the second-subsystem firewall structured to communicate the

Art Unit: 2165

application output data to the second computer subsystem (see page 14, paragraph 175) through a hypertext transfer protocol (see page 7, paragraph 83.)

In response to the applicant's arguments that "there appears to be no such motivation discussed in the references themselves, and nothing to indicate that Erickson's approach would be advantageous or even operable in Perkowski's system", the arguments have been fully considered but are not deemed persuasive, because the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both cited references teach inventions that are in the same field of endeavor, and the examiner is establishing obviousness in the knowledge generally available to one of ordinary skill in the art, to modify Perkowski by the teaching of Erickson, because a keep-alive connection that is kept open for the duration of a collaboration, would enable the system to keep the connection active/alive even during periods of inactivity, as taught by Erickson et al (see column 9, lines 17-19.)

In response to the applicant's arguments regarding "threads" in the second computer subsystem, the arguments have been fully considered but are not deemed persuasive, because

Art Unit: 2165

Perkowski teaches opening a first-subsystem thread in the second computer subsystem for receiving the application output data in page 13, paragraph 163.

In response to the applicant's arguments regarding "block on a read", the arguments have been fully considered but are not deemed persuasive, because the examiner is reading "blocking on a read" on Perkowski's "carrying out a search" in paragraph 206.

In response to the applicant's arguments regarding "keep-alive connection", "data transfer", and "causing the first subsystem thread to sleep", the applicant is directed to the remarks and discussions made in the rejection of the above referenced claims.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2165

6. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Tony Mahmoudi whose telephone number is (703) 305-4887. The examiner can normally be reached on Mondays-Fridays from 08:00 am to 04:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached at (703) 305-3830.

tm

October 12, 2004



**SAM RIMELL
PRIMARY EXAMINER**